

## REMARKS

The present response is intended to be fully responsive to the rejection raised in the Office action, and is believed to place the application in condition for allowance. Further, the Applicants do not acquiesce to any portion of the Office Action not particularly addressed. Favorable reconsideration and allowance of the application is respectfully requested.

In the Office action, the Office noted that claims 1 and 2 are pending and rejected. Applicants amend claims 1 and 2 and add claims 3-10. Applicants have not introduced any new matter by way of the foregoing amendments.

In view of the above amendments and the following discussion, the Applicants submit that none of the claims now pending in the application are obvious under the provisions of 35 U.S.C. § 103. Thus, Applicants believe that all of these claims are now in condition for allowance.

## REJECTION

The Office rejected claims 1 and 2 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,233,50 issued to Gersho et al. (hereon after "*Gersho*") in view of U.S. Patent No. 5,495,556 issued to Masaaki Honda (hereon after "*Honda*"). The Applicants respectfully traverse the rejections.

Applicants amend claim 1 to recite a combination of elements directed to a method of speech encoding of a digital signal processor. The combination of elements includes "estimating a zero-phase equalization filter coefficient and a bandpass voicing strengths in a frequency band; removing linear phase from the zero-phase equalization filter; setting the phase of the equalization filter coefficient to a zero, wherein the equalization filter coefficient corresponds to a low-voiced harmonics identified by bandpass voicing estimate; and adding back the linear component to the zero-phase equalization filter."

The Applicants agree with Office that *Gersho* does not "disclose determining a zero-phase equalization filter for said frame; and that harmonic which fall into a band that was determined to have a voicing level below a threshold are replaced for said zero-phase equalization filter." *Office Action*, at page 3. In support of a contention that *Honda* discloses such an element, the Office cites *Honda* at col. 4, lines 5-9. The Applicants respectfully disagree.

However, the Applicants submit that *Gersho* and *Honda* teach away from each other. More specifically, *Gersho* specifically requires “that the design of the coding scheme for the transition segments must take into account the local time events characteristic of the transition signal,” *Gersho*, at col. 14 lines 24-41, and that the encoder must also carry out the onset linear phase estimation procedure and to keep track of the reconstructed phase in order to be able to perform the offset phase synchronization, described in the following section.” *Id.* at col. 16 lines 1-10. *Honda* merely discloses a “spectral envelope error of a speech coded at 4.8 kb/s is about 1 dB. A coding delay of this invention is 45 ms, which is equal to or shorter than that of the conventional low-bit rate speech coding schemes.” *Honda*, at col. 16 lines 11-22. *Honda* is devoid from discloses taking transition segments into account or an encoder that would carry out the onset linear phase estimation to keep track of reconstructed phase.

Accordingly, it is Applicants’ opinion that neither *Gersho* nor *Honda* suggest or show a motivation for modifying the reference or to combine the reference teachings. In addition, it is Applicants’ opinion that there is no evidence in either prior art that shows a “reasonable expectation of success” in combining the references.

Furthermore, it is Applicants’ opinion that neither *Gersho* nor *Honda* teach or suggest “estimating a zero-phase equalization filter coefficient and a bandpass voicing strengths in a frequency band; removing linear phase from the zero-phase equalization filter; setting the phase of the equalization filter coefficient to a zero, wherein the equalization filter coefficient corresponds to a low-voiced harmonics identified by bandpass voicing estimate; and adding back the linear component to the zero-phase equalization filter,” as recited in amended claim 1. Claim 6 recites similar features as those recited in amended claim 1. Thus, it is Applicant’s belief that a prima facie case of obviousness has not been provided. Therefore, the Applicants submit that *Gersho* and *Honda*, alone and in combination, do not teach all the elements of the amended claims 1 and 6 or render claims 1 and 6 obvious.

Given that dependent claims 2-5 and claims 7-10 depend directly from amended, independent claims 1 and 6, claims 2-5 and 7-10 necessarily include all the elements of amended, independent claims 1 or 10. Since *Gersho* and *Honda*, alone and in combination, do not teach all the elements of amended independent claims 1 and 6, the Applicants submit that *Gersho* and *Honda*, alone and in

combination, also do not teach all the elements or render claims 2-5 and 6-10 obvious.

The Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-10.

### **CONCLUSION**

In view of the foregoing, the Applicants submit that none of the claims presently in the application are obvious under the provisions of 35 U.S.C. §103. In addition, the Applicants submit that all of the claims presently in the application comply with 35 U.S.C. §101. Consequently, the Applicants believe that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Office believes that any unresolved issues still exist or if, in the opinion of the Office, a telephone conference would expedite passing the present application to issue, the Office is invited to call the undersigned attorney directly at 972-917-4365 or the office of the undersigned attorney at 972-917-5651 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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